

Work Order ID 112605

January-30-14 11:51:17 AM

112605

Page 1

Item ID: D3691-1

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Stud

Start Date: 1/30/14 Start Qty: 8.00

8

Cust Item ID:

Required Date: 1/30/14 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 14-02-03

Tooling:

Date:

Run Start ***NR1***

QC: Date:

SPC (Y/N):

Date:

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr | Revision Nbr | | | | | | | | |
| D3691 | E | | | | | | | | |
| 100 | | 0.00 | | | | | | | DAS |
| *100* | BAND SAW | | | | | 9 | Ø | | 40 |
| Bandsaw | Memo | 0.00 | | | | | | | 9-89 |
| Jeaspa Bandsaw | ***DO NOT USE CHOP SAW*** | | | | | | | | 14/04/16 |
| | Cut blank 7.750" long | | | | | | | | |
| 110 | | 0.00 | | | | | | | DAS |
| *110* | DOOSAN LATHE | | | | | 8 | 1 | | 40 |
| Doosan | Memo | 0.00 | | | | | | | 9-89 |
| Doosan Lathe | 1-Turn as per Folio FA716 Rev <u>AA</u> & Dwg D3691 Rev: <u>E</u> 2-Deburr per dwg D3691 3-Check .625" bore with DT9530 GO/NO GO Gauge | | | | | | | | 14/04/16 |
| 160 | | 0.00 | | | | | | | DAS |
| *160* | QC2- Inspect parts off machine FAI/FAIB | | | | | 8 | Ø | | 40 |
| QC | Memo | 0.00 | | | | | | | 9-89 |
| Quality Control | | | | | | | | | 14/04/16 |

PTO

DQA:

Date:

14/05/01

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed:

Date:

14-4-30

Work Order update only ☐

| | | | | | |
|---------------------------|---|---|------------------------------------|--|--------------------------------------|
| Work Order: <u>112605</u> | DISPOSITION Rework <input type="checkbox"/> Scrap <input checked="" type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS | | | |
| Part No. <u>D3691-1</u> | | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> |
| NCR No. <u>14-3784</u> | | Machining <input checked="" type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> |
| | | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> |
| | | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |

| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|----------|------|-----|--|-------------------|---|----------------------|---------------------|-----------------------------|
| Design | 14/04/16 | 110 | 1 | DRILL pushed PART IN The collet. Dimensions are out of tolerance. Pressure has been added TO The collet. Re press of machining | DAS 16 9-89 | Scrap and Replaced Batch M. <u>D26952</u> | DAS 40 9-89 14/04/16 | DAS 27 9-89 14/4/23 | DAS 16 9-89 Q52042 14/06/14 |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | | |
|--|--|---|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input checked="" type="checkbox"/> Other |
| No specific collar present to be given Process: | | | |

Work Order ID 112605

January-30-14 11:51:17 AM

112605

Page 2

Item ID: D3691-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Stud
 Start Date: 1/30/14 Start Qty: 8.00 ***g*** Cust Item ID:
 Required Date: 1/30/14 Req'd Qty: 8.00 ***g*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|----------------------|---------|-------------|--------------|---------------|---------------|------------------|-------------------|
| 170 *170* QC Quality Control | QC8- Inspect parts - second check Memo 100% CHECK,CHECK ALL DIMENSIONS AND THREAD FIT | 0.00 0.00 | | B. 14/04/21 | | 8 | 0 | | DAG 08 9889 |
| 171 *171* Purchasing Purchasing | Memo Liquid Penetrant Inspection as per QSI 038 Issue P/O: <u>23883</u> LPI as per dwg D3691 Attach copy of NDT results to work order | 0.00 0.00 | | | | | | | CL 14/04/23 8 |
| 173 *173* Packaging Packaging | Receive & Inspect for Damage & Mat'l Certs Memo | 0.00 0.00 | | | | | | | 14/4/23 (8) |

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

| | | | | | | | | | | | | | | | | | | |
|--|--|--|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
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| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | | |
|--|--|---|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____ |
|--|--|---|---|

Work Order ID 112605

112605

Page 3

January-30-14 11:51:17 AM

Item ID: D3691-1 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Stud
 Start Date: 1/30/14 Start Qty: 8.00 *g* Cust Item ID:
 Required Date: 1/30/14 Req'd Qty: 8.00 *g* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 175 *175* QC Quality Control | QC5- Inspect part completeness to step on W/O Memo | 0.00 0.00 | | | | 8 | | | |
| 180 *180* Packaging Packaging | Identify as per dwg & Stock Location Memo | 0.00 0.00 | | | | 8X | | 14-4-23 | |
| 190 *190* QC Quality Control | QC21- Final Inspection - Work Order Release Memo | 0.00 0.00 | | | | | | 14/04/24 | |

DAS
26
9-89

14-4-24

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

| | | | | | | | | | | | | | | | | | | |
|--|--|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
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| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

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|--|--|---|---|

Picklist Print

January-30-14 11:51:16 AM

Page 1
T

Work Order ID: 112605

Parent Item: D3691-1

Parent Item Name: Stud

Start Date: 1/30/14

Required Date: 1/30/14

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:A New Issue 08-01-29 JLM Verified By:EC
 IPP Rev:B Material Change 09-01-07 JLM Verified By:EC IPP REV:C AS PER REV D 10-03-16 JLM VERIFIED BY:EC
 IPP Rev:C Added note on Step 2 09-01-26 JLM Verified By:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|-------------------|
| M174PH-H900R1.000 17-4SS H900 ROUND BAR 1.00 | | Purchased | No | | | | f | 104.0000 | | 5.8429216 | | 14/04/16 | DAS 40 9-89 |
| | | | | <u>Location</u> | | | | <u>Loc Qty</u> | | | | | |
| | | | | MAT031 | | | | 104 | | | | | |
| | | | | → m126952 | | | | 44 | | | | 6.7 | |
| | | | | m127334 | | | | 60 | | | | | |

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

| | | | | | | | | | | | | | | | | | | |
|--|--|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
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| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
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| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
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| Offset/Setup | | | | | | | | | |
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| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

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| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____ |
|--|--|---|---|

| | | | |
|--|--|---------------------|---------|
| DART AEROSPACE LTD | | Work Order: | 112605 |
| Description: Stud | | Part Number: | D3691-1 |
| Inspection Dwg: D3691 Rev: E | | Page 1 of 1 | |

FIRST ARTICLE INSPECTION CHECKLIST

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|-----------------|------------------|--------|--------|----------------------|----------|
| Ø0.695 | +/-0.010 | .690 | ✓ | | VEW | PAP-12 |
| 45° | 0.5° | 45° | ✓ | | Ang G | |
| 0.623 | +0.004/-0.000 | .623 | ✓ | | VEW | " |
| 1.25 | +0.000/-0.03 | 1.230 | ✓ | | " | " |
| 118° | 0.5° | 118 | ✓ | | Ang G | |
| R0.03 | +/-0.030 | .03 | ✓ | | Rad G | |
| 0.11 Ref | +/-0.030 | .11 | ✓ | | VEW | " |
| 90° | 0.5° | 90° | ✓ | | Ang G | |
| Ø0.216 | +0.005/-0.001 | .217 | ✓ | | VEW | " |
| 1.31 | +/-0.030 | 1.31 | ✓ | | " | " |
| 1.65 | +/-0.030 | 1.65 | ✓ | | " | " |
| 0.750 | +0.000/-0.010 | .743 | ✓ | | " | " |
| Ø0.659 | +0.000/-0.015 | .653 | ✓ | | " | " |
| 7.625 | +/-0.015 | 7.625 | ✓ | | " | CNC-02 |
| 2.90 | +/-0.030 | 2.90 | ✓ | | " | PAP-12 |
| 3/4-16UNF-2A | N/A | | ✓ | | MOW | |
| 0.075 x 45° | +/-0.010 x 0.5° | .085 | ✓ | | VEW | PAP-12 |
| 0.375 | +0.000/-0.010 | .368 | ✓ | | " | " |
| Ø0.216 | +0.005/-0.001 | .217 | ✓ | | " | " |
| R0.25 | +/-0.030 | .250 | ✓ | | Rad G | |
| R0.50 | +/-0.030 | .500 | ✓ | | " | |
| Ø0.825 | +/-0.010 | .826 | ✓ | | VEW | PAP-12 |

DAS

| | |
|---------------------|------------|
| Measured by: | 40 9-89 |
| Date: | 14/04/16 |

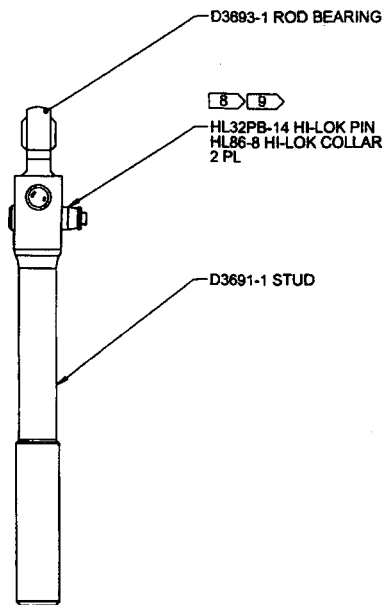
| | | |
|--------------------|----------|-----------|
| Audited by: | D.A. | DAS 08 |
| Date: | 14/04/21 | 988 |

| | |
|------------------------------|--|
| Preliminary Approval: | |
| Date: | |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|----------------------------------|------------|----------|
| A | 09.05.11 | New Issue | KJ | |
| B | 09.11.04 | Dwg Rev updated | KJ | |
| C | 10.03.31 | Dimensions revised per Dwg Rev D | KJ | |
| D | 13.02.27 | Ø0.216 was Ø0.189 | KJ | |
| E | 13.11.04 | Dimensions revised | KJ | |

| ITEM | QTY -041 | P/N | DESCRIPTION |
|------|-------------|------------|-----------------|
| 1 | X | D3691-041 | STUD ASSEMBLY |
| 2 | 1 | D3691-1 | STUD |
| 3 | 1 | D3693-1 | ROD END BEARING |
| 4 | 2 | HL32PB8-14 | HI-LOK PIN |
| 5 | 2 | HL86-8 | HI-LOK COLLAR |

E



112605 MWS
1402-03



RELEASED
2013-01-22
MP

E D3691-041 STUD ASSEMBLY

NOTES:

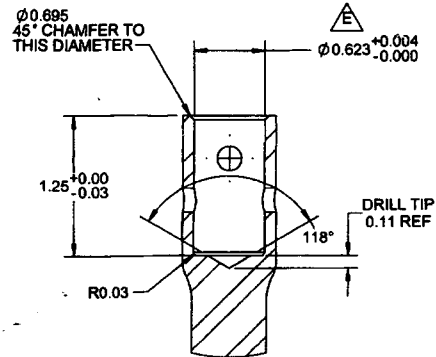
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.04 lbs
- 8) ALIGN THE PILOT HOLES IN D3693-1 WITH PILOT HOLES IN D3691-1. ENLARGE EACH HOLE USING A P/N 13-420 PILOTED DRILL (0.2314 DIA./0.2158 PILOT). REAM EACH HOLE USING A P/N 44-300 STEP REAMER (0.247 DIA./0.2314 PILOT). CLEAN AND DEBURR ALL HOLES PRIOR TO ASSEMBLY.
- 9) ASSEMBLE D3693-1 WITH D3691-1 USING HYSOL EA934NA OR MAGNOBOND 8398 ADHESIVE BETWEEN MATING SURFACES.

E

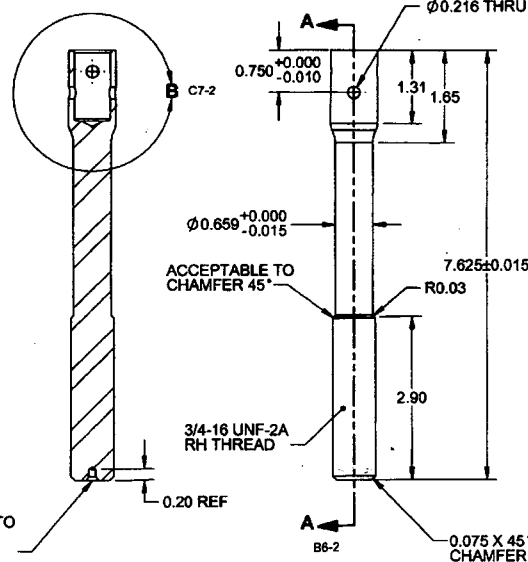
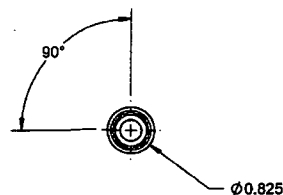
| | | | | | |
|------------|---|---|--|--|--------------|
| E | ADD -041 STUD ASSEMBLY. ASSEMBLY INSTRUCTIONS (ZN A8-1, ZN B6-1, ZN D7-1). Ø0.216 WAS Ø0.189 (ZN D2-2, D4-2). Ø0.623 WAS Ø0.625 (ZN D7-2). RE-FORMAT NOTES SECTION AS PER QSI 043 (ZN A8-1), REF NCR 12-2074. | | | DB | 12.12.07 |
| D | 7.625 WAS 7.750 (ZN C4-1) | | | RF | 10.03.03 |
| C | 0.20 WAS 0.16 & CENTER DRILL #4 WAS CENTER DRILL #2 (ZN B6-1). UPDATE NOTE 8 TO REF QSI (ZN A8-1) | | | RF | 09.09.09 |
| B | CHANGE TO 17-4PH H-900 (ZN A8-1). Ø0.685 WAS Ø0.665 (ZN D8-1). REFORMATTED TO CURRENT DWG STANDARDS | | | RF | 08.11.24 |
| A | NEW ISSUE | | | RF | 08.03.12 |
| REV. | | DESCRIPTION | | BY | DATE |
| DESIGN | | RF | | DART AEROSPACE LTD HAWKESSBURY, ONTARIO, CANADA | |
| DRAWN | | DB | | | |
| CHECKED | | MB | | DRAWING NO. | REV. E |
| MFG. APPR. | | JLM | | D3691 | SHEET 1 OF 2 |
| APPROVED | |  | | TITLE | SCALE |
| DE APPR. | |  | | STUD | NTS |
| DATE | | 12.12.07 | | | |

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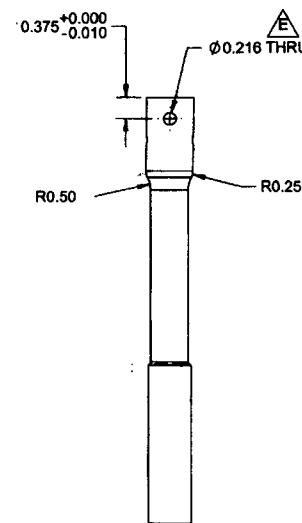
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DETAIL B CS-2
SCALE 1:1



SECTION A-A B4-2



NOTES:

- 1) MATERIAL: 17-4PH STAINLESS STEEL ROUND BAR PER AMS 5643 H-900 CONDITION
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.80 lb
- 8) LPI PER QSI 038 4.1.1 (ASTM E1417 LEVEL 2)

| | | | |
|------------|----------|---|--------------|
| DESIGN | RF | DART AEROSPACE LTD | |
| DRAWN | DB | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | MB | DRAWING NO. | REV. E |
| MFG. APPR. | JLM | D3691 | SHEET 2 OF 2 |
| APPROVED | | TITLE | SCALE |
| DE APPR. | | STUD | NTS |
| DATE | 12.12.07 | <small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> | |

RELEASED
2013-01-22

**skyservice****Work Order Traveler**
Sky Service F.B.O. Inc.

Page: 1 of 1

DOT APP 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO19566

Customer: Cash Sale

Dept: NDT YUL 27

Reference: 23883

Descr:

PN: DART AEROSPACE

S/N: 9-19

Qty: 1

Make:

Model:

Reg: 4/4/23

A/C S/N:

TSN: 0

CSN: 0

TSO: 0

Task: UNSCHEDULED

Sequence: 1

Work Required:

CARRY OUT NDT ON THE FOLLOWING ITEMS:

① STUD, ITEM ID D3691-1 QTY 8 WO 112605

② STRUT, ITEM ID D4928-1 QTY 4 WO 116554

Action Taken:

Date:

Initial/Stamp:

LIQUID PENETRANT INSPECTION CARRIED
OUT IAW ASTM E1417-M13 ON FOLLOWING
ITEMS:

① D3691-1, WO 112605 =

22 APR 14



② D4928-1, WO 116554 =

22 APR 14



| Description | Location | P/N | Qty | Batch | S/N Off | S/N On |
|--------------|----------|----------|-----|---------|---------|--------|
| PENETRANT: | ARDEX | 970 P2SE | | TD10484 | | |
| BLACK LIGHT: | M 20189 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:

Name:

GARY SMITH



Date:

22 APR
2014